

R0028  
S920028





MASSEY

**A SYSTEMATIC APPROACH  
TO GATHERING AND CATALOGING  
SELECTED RECREATION AND VIS  
USE DATA ON FOREST LANDS**

**A requirement of the Fall 1979 Forest Service/  
Clemson University Course: Outdoor Recreation Management**

**by: James L. Massey**

TABLE OF CONTENTS:

The Problem: .....	
FOG, <u>F</u> ield <u>O</u> bservation <u>G</u> uide .....	
VOS, <u>V</u> isitor <u>O</u> bservation <u>S</u> ystem .....	
FVC, <u>F</u> orest <u>V</u> isitation <u>C</u> ensus .....	

## CLEMSON PROJECT

### The Problem:

In Section 2, Findings of Public Law 94-588 National Forest Management Act of 1976, Congress finds that -

"(3) to serve the national interest, the renewable resource program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources for the Nation's public and private forests and rangelands, through analysis of environmental and economic impacts, coordination of multiple use and sustained yield opportunities as provided in the Multiple-Use Sustained Yield Act of 1960 (74 Stat. 215; 16 USC 528-531) and public participation in the development of the program;

and

"(4) the new knowledge derived from coordinated public and private research programs will promote a sound technical and ecological base for effective management, use, and protection of the Nation's renewable resources;

and

"(6) the Forest Service . . . has both a responsibility and an opportunity to be a leader in assuring that the Nation maintain a natural resource conservation posture that will meet the requirements of our people in perpetuity;"

From these findings it is evident that Congress expects USDA-Forest Service to assess present and anticipated uses, to develop new knowledge from research programs, and meet future needs of our people.

The problem is that USFS lacks sufficient Recreation/VIS use data to meet planning needs. The problem is actually two fold: 1) OMB generally will not give clearance Forest by Forest to do visitor use surveys, and 2) visitor use surveys are taken at a single point in time and there is no mechanism for routine use data collection. Data gathered over time is needed to define use trends.

The kind of information required for adequate planning . . . particularly Recreation/VIS planning . . . can, in most cases, best be gathered by asking people directly what they have been doing, prefer to do and why.

OMB has told us we cannot survey people without their approval and they are reluctant to grant that approval. As a result much of our Recreation/VIS planning and program development decisions are made on second hand meager data.

To improve our service to the public, we need to know who is using our areas, what they are doing while there, who is attending Recreation/VIS programs and who is not, what activities are competing with Recreation/VIS programs and where. We also need to be able to predict trends in visitor use and monitor these trends for potential change.

#### Objectives:

To propose a system of instruments that will allow USFS to gather Recreation visitor use data needed to improve VIS and Recreation planning.

#### Methods:

Previously developed instruments will be modified and directions written for implementing a systematic approach to gathering Recreation/VIS use data.

The proposed system is in 3 parts

- A. Field Observation Guide: An informal approach to gathering visitor use information which does not require OMB approval.
- B. Visitor Observation System: A formal systematic process for visitor observation which does not require OMB approval.
- C. Forest Visitation Census: A limited monitoring of visitor use requiring OMB approval.

Following are samples of the proposed systems. The Visitation Census was developed by Dr. Kenneth Hornback, Sociologist, National Park Service; the Visitor Observation and Field Observation Systems by Dr. John Hanna, Texas A&M University. All of these instruments have been field tested outside USFS. I have modified them only slightly. They would need to be field tested in USFS and further modified for our use.

Data should be easily adapted to fit a computer system. Pinchot Institute has expressed an interest in using Grey Towers as a cultural test site for these instruments. White Mountain or the Monongahela would be a choice for a natural area test.



Action Plan

1. Train PICS Staff in technique
2. Field Test FOG & visitor observation techniques at Grey Towers
3. Revise as necessary and evaluate possible computer applications
4. Field test revised FOG and visitor observation techniques on White Mountain
5. Implement FOG and visitor Observation techniques Region-wide by summer of '81
6. Submit Forest visitation census to WO for review and approval and forwarding to OMB for consideration

Sources:

1. Parks Visitation Census. NPS, In-House paper (draft). 1978. Kenneth Hornback.
2. Visitor Observation for Interpretation. Hanna Silvy and Associates. 1979. NPS Contract No. CX9000-6-0103.
3. Field Observation Guide. NPS, In-House paper, undated.

Contacts:

In developing this presentation I have discussed the subject with the following people:

1. Dick Klade, OI, R-92
2. Fred Lintelmann, Rec. Staff, R-9
3. Buzz Durham, LA, R-9
4. Bill Shirley, PPB, R-9
5. Gren Lloyd, VIS, WO
6. John Gray, Director, Pinchot Institute
7. Dr. Kenneth Hornback, Sociologist, NPS
8. Dr. John Hanna, Dept. of Rec. & Parks, Texas A&M University
9. Vernon D. Dame, Chief, Interpretation and Visitor Services, NPS

BUDGET ESTIMATES FOR FIELD TEST

Planning & Development

GS-12 (Massey) 40 hrs. \$ 520

Printing

500

Assembly of Test Materials

GS-12 (Massey) 24 hrs. 312

GS-4 (Clerk) 32 hrs. 160

Training:

GS-12 (Massey) 8 hrs. 104

GS-11 (VIS Specialist) 8 hrs. 80

Participants 4 hrs. each (est) 500

Miscellaneous Supplies

50

Transportation

300

---

TOTAL \$2,526

## FOG ANALYSIS:

After collecting a seasonal sampling, punch the numbered holes along the perimeter of each card which correspond with the numbers of the checked boxes. Compile the cards and insert the needle through a desired hole. All cards for that variable will drop out. By counting the number of cards which drop out, percentages of the sampled visitor population who responded similarly to that variable can be determined.

Further analysis may be accomplished by a cross-tabulation of two or more variables. You can thus determine the percentage of the sampled population who responded similarly to two or more variables. To do this, insert needle in say hole 33. Take the cards that drop out. Count the cards. Insert the needle in hole 2 of those cards that dropped out. Count the cards that drop out. This % tells you what % of families arrived in ORV's.

Due to the random manner of sampling the accumulated data cannot serve as a basis for substantive conclusions and even generalizations concerning the characteristics of visitors is questionable, but we do have some additional information on which to base our planning decisions. It is a start.

## FIELD OBSERVATION GUIDE: FOG

### A Method for FOG Card Tabulation:

#### 1. General

The FOG card survey is conducted as an informal Host-Visitor conversation. The primary intent is to collect information regarding the forest visitor, as well as to record visitor comments and criticisms of our operations. It is a convenient method of cataloging information we gather every day in casual conversation. It is useful in comparing visitor characteristics from year to year for planning purposes and in providing the forest with questions and complaints which can subsequently be resolved.

Most people find the FOG card easy to fill out. One FOG will be completed for each encounter with a visitor or visiting group. Few FOGs will be completed entirely, but when many cards are compiled at the end of the year, a valuable composite of the forests users will be known.

The procedure is simple. Check the appropriate box of any item which you learn about during your conversation with visitors. Record only that information which has been clearly stated by the visitor. Do this AFTER any occasion during which you have an opportunity to gain some information regarding the forest visitor.



NEVER ASK THE VISITOR TO FILL OUT THE FOG. DO NOT READ FROM IT LIKE A LIST OF INTERVIEW QUESTIONS. A conversation should never be forced to include items covered in the FOG which would not occur in the conversation naturally. Never include the visitors name or address on the FOG card or any other feature which could result in personal identification. To do so would violate the person's right to privacy.

### FOG Card Elements

#### FRONT:

Transportation - Indicate the method of transportation used to arrive at the area. Usually only one item will be checked.

Equipment - Indicate additional equipment observed during the contact. May check more than one.

Group Size - Check one or a combination totaling the group size.

Time of Arrival - Time the visitor arrived on the forest.

Length of Stay - Time the visitor plans to stay on the forest.

#### Type of Group:

Type of Contact - Indicate the kind of activity you were involved in when you make the visitor contact.

How Learned of Forest - May check more than one, but note principle way.

Age - May check more than one.

#### Repeat Visits:

Site Visited #1 - What was the visitors first stop on the forest.

Activity at Site #1 - What did the visitor do at stop number 1? May list more than one activity.

Site Visited #2 - Same as above.

Activity at Site #2 - Same as above.

Hometown - List city and state if possible.

**BACK:**

Date - List in 2 digit codes, e.g., 01/15/80

Day - List day of week, M, TU, W, TH, F, SA, SU.

Site - Site name.

Initials - Yours

Visitor Questions - Record question(s) that were asked by the visitors. If many people ask the same question(s) perhaps we will be able to find alternative methods to answer these questions.

Visitor Comments - Record both positive and negative comments. Include location if appropriate. Note any complaints or compliments that people have about their forest experience. Include any suggestions they have regarding existing or proposed activities on the forest.

**FOG**

**FRONT**

Transportation

1. Sedan, PU, SW
2. ORV
3. Motor Home
4. Motorcycle/Bike
5. Bicycle
6. Camper, PU, Van
7. Pedestrian
8. Other

Group Size

18. 1
19. 2
20. 4
21. 7
22. 10
23. 20 +

Equipment

9. Bicycle
10. Camper-in-tow
11. Camp-stoves, tents,  
chairs, coolers
12. Fishing gear
13. Non-power boat
14. ORV-in-tow
15. Power-boat
16. Sail-boat
17. Other

Time of Arrival

24. 10-12 AM
25. 12-2 PM
26. 2-5 PM
27. After 5 PM

Length of Stay

28. 1-4 Hours
29. 5-12 "
30. 1 Night
31. 2-3 "
32. 4+ "

**FOG**Type of Group

- 33. Individual/Friends
- 34. Family(ies)
- 35. School
- 36. Organization

Age

- 46. Infant(s) to 5 years
- 47. Children 6-18 years
- 48. Adults 18 + "
- 49. Elderly

Type of Contact

- 37. Visitor Center
- 38. Roving
- 39. VIS Activity
- 40. Ranger patrol

Repeat Visits

- 50. 1st Time
- 51. Once Before
- 52. 2 + Times

How Learned of Forest

- 41. Live Locally
- 42. Friends
- 43. Media
- 44. Signs
- 45. Other

Site Visited #1

- 53. These spaces will
- 54. be filled in by the
- 55. individual Forests.
- 56.
- 57.
- 58.
- 59.
- 60.

**FOG**FRONTActivity at Site #1

- 61. Sight-seeing
- 62. Picnicking
- 63. Camp
- 64. Hike
- 65. Fish
- 66. Swim
- 67. Photography
- 68. Native Study
- 69. Interpretive Programs

Site Visited #2

- 70. These spaces
- 71. will be filled
- 72. in by the
- 73. individual Forests
- 74.
- 75.
- 76.
- 77.
- 78.
- 79.

Activity at Site #2

- 80. Sight-seeing
- 81. Picnic
- 82. Camp
- 83. Hike
- 84. Fish
- 85. Swim
- 86. Boat
- 87. Water Ski
- 88. Canoe
- 89. \_\_\_\_\_

- 90. State
- 91. City

Hometown



FOG

BACK

DATE        /        /        Day Observation  
Site                                  Initials       

Visitor Questions:

Visitor Comments:



# REDWOOD FOG - 4

17	BEFORE 10 A.M.	31	HANDICAPPED	65	LIVE LOCALLY	73	CRESCENT CITY	79	SIGHTSEEING
18	10-12 A.M.	32	INFANTS (0-10 YRS)	66	FRIENDS	74	ENDERTS BEACH	80	PICNICKING
19	12-2 P.M.	33	CHILDREN (10-18 YRS)	67	RADIO/TV	75	MOUCH	81	CAMPING
20	2-5 P.M.	34	ELDERLY	68	PRINTED MEDIA	76	JED SMITH	82	HIKING
21	AFTER 5 P.M.	35	NON-ENG. SPEAKING	69	SHOOTING	77	BLM GROVE	83	FISHING
22	OTHER (SPECIFY)	36	OTHER (SPECIFY)	70		78	BLM GROVE	84	SWIMMING
23	1 PERSON	37	SEDAN/SW/PU	71		79	BLM CREEK	85	PHOTOGRAPHY
24	2 PEOPLE	38	CAMPER VAN	72		80	CHICK	86	PLANT OBSERVATION
25	3-4 PEOPLE	39	MOTOR HOME	73		81	REDWOOD CREEK	87	NATURE STUDY
26	5-6 PEOPLE	40	BUS	74		82		88	
27	7+ PEOPLE	41	VEHICLE/TRAILER	75		83		89	
28		42	MOTORCYCLE	76		84		90	
29		43	THUMB	77		85		91	
30		44		78		86		92	
31		45		79		87		93	
32		46		80		88		94	
33		47		81		89		95	
34		48		82		90		96	
35		49		83		91		97	
36		50		84		92		98	
37		51		85		93		99	
38		52		86		94		100	
39		53		87		95		101	
40		54		88		96		102	
41		55		89		97		103	
42		56		90		98		104	
43		57		91		99		105	
44		58		92		100		106	
45		59		93		101		107	
46		60		94		102		108	
47		61		95		103		109	
48		62		96		104		110	
49		63		97		105		111	
50		64		98		106		112	
51		65		99		107		113	
52		66		100		108		114	
53		67		101		109		115	
54		68		102		110		116	
55		69		103		111		117	
56		70		104		112		118	
57		71		105		113		119	
58		72		106		114		120	
59		73		107		115		121	
60		74		108		116		122	
61		75		109		117		123	
62		76		110		118		124	
63		77		111		119		125	
64		78		112		120		126	
65		79		113		121		127	
66		80		114		122		128	
67		81		115		123		129	
68		82		116		124		130	
69		83		117		125		131	
70		84		118		126		132	
71		85		119		127		133	
72		86		120		128		134	
73		87		121		129		135	
74		88		122		130		136	
75		89		123		131		137	
76		90		124		132		138	
77		91		125		133		139	
78		92		126		134		140	
79		93		127		135		141	
80		94		128		136		142	
81		95		129		137		143	
82		96		130		138		144	
83		97		131		139		145	
84		98		132		140		146	
85		99		133		141		147	
86		100		134		142		148	
87		101		135		143		149	
88		102		136		144		150	
89		103		137		145		151	
90		104		138		146		152	
91		105		139		147		153	
92		106		140		148		154	
93		107		141		149		155	
94		108		142		150		156	
95		109		143		151		157	
96		110		144		152		158	
97		111		145		153		159	
98		112		146		154		160	
99		113		147		155		161	
100		114		148		156		162	
101		115		149		157		163	
102		116		150		158		164	
103		117		151		159		165	
104		118		152		160		166	
105		119		153		161		167	
106		120		154		162		168	
107		121		155		163		169	
108		122		156		164		170	
109		123		157		165		171	
110		124		158		166		172	
111		125		159		167		173	
112		126		160		168		174	
113		127		161		169		175	
114		128		162		170		176	
115		129		163		171		177	
116		130		164		172		178	
117		131		165		173		179	
118		132		166		174		180	
119		133		167		175		181	
120		134		168		176		182	
121		135		169		177		183	
122		136		170		178		184	
123		137		171		179		185	
124		138		172		180		186	
125		139		173		181		187	
126		140		174		182		188	
127		141		175		183		189	
128		142		176		184		190	
129		143		177		185		191	
130		144		178		186		192	
131		145		179		187		193	
132		146		180		188		194	
133		147		181		189		195	
134		148		182		190		196	
135		149		183		191		197	
136		150		184		192		198	
137		151		185		193		199	
138		152		186		194		200	
139		153		187		195		201	
140		154		188		196		202	
141		155		189		197		203	
142		156		190		198		204	
143		157		191		199		205	
144		158		192		200		206	
145		159		193		201		207	
146		160		194		202		208	
147		161		195		203		209	
148		162		196		204		210	
149		163		197		205		211	
150		164		198		206		212	
151		165		199		207		213	
152		166		200		208		214	
153		167		201		209		215	
154		168		202		210		216	
155		169		203		211		217	
156		170		204		212		218	
157		171		205		213		219	
158		172		206		214		220	
159		173		207		215		221	
160		174		208		216		222	
161		175		209		217		223	
162		176		210		218		224	
163		177		211		219		225	
164		178		212		220		226	
165		179		213		221		227	
166		180		214		222		228	
167		181		215		223		229	
168		182		216		224		230	
169		183		217		225		231	
170		184		218		226		232	
171		185		219		227		233	
172		186		220		228		234	
173		187		221		229		235	
174		188		222		230		236	
175		189		223		231		237	
176		190		224		232		238	
177		191		225		233		239	
178		192		226		234		240	
179		193		227		235		241	
180		194		228		236		242	
181		195		229		237		243	
182		196		230		238		244	
183		197		231		239		245	
184		198		232		240		246	
185		199		233		241		247	
186		200		234		242		248	
187		201		235		243		249	
188		202		236		244		250	
189		203		237		245		251	
190		204		238		246		252	
191		205		239		247		253	
192		206		240		248		254	
193		207		241		249		255	
194		208		242		250		256	
195		209		243		251		257	
196		210		244		252		258	
197		211		245		253		259	
198		212		246		254		260	
199		213		247		255		261	
200		214		248		256		262	
201		215		249		257		263	
202		216		250		258		264	
203		217		251					

*hanna, silvy & associates*  
consultants for interpretation

*john hanna*

*valeen silvy*

RR5 - Box 1107  
Bryan, Tx. 77801  
(713) 846-1326

## Visitor Observation for Interpretatio

Valeen Silvy & John Hanna  
January 1979

*hanna, silvy & associates*  
Rt. 5 box 1107  
Bryan, TX 77801



# Contents

The Washington Office of Interpretation and Visitor Services and the Sociology Studies Program, Co-operative Park Studies Unit, College of Forest Resources, University of Washington, Seattle WA, sponsored this project. It combines work done by Don Field, Chief Scientist, Pacific NW Region, and Jim Gramann, one of Don's graduate students, with work by John Hanna, Professor, Texas A&M University, Valeen Silvy, Consultant for Interpretation.  
Contract CX9000-6-0103

---

Introduction .....	1
Method .....	4
Observational Method .....	4
Sample Selection .....	6
Data Collection .....	9
Application .....	13
Data Application .....	13
Future Possibilities .....	17
Summary .....	19
Appendix A: Keysort System .....	20
Appendix B: Keysort Card .....	23
Appendix C: Variable Definition .....	25
Appendix D: Bibliography .....	32
Appendix E: Table of Random Dates .....	33

# Introduction

Years of experience have probably taught you a great deal about the visitors to your area. Now you need to transfer this information into a system that provides the weapons needed to fight the accountability struggle. The system proposed here probably can't beat your own system for providing data about the visitor, but it can get the data into a format that you can use to justify your program and meet the needs of your visitor.

The system described here is a tool, not an answer. It provides a way to find out more about the park visitor while respecting governmental guidelines. It will require that you observe visitors and transfer the observations into useable information which can aid your interpretive effort.

Observable visitor characteristics do not show a complete picture of the visitor. They can be misleading. Therefore, we caution you to refrain from stereotyping visitors. Visitors simply will not always fit into the slots provided. They sometimes fit only if you force them, but then would probably not attend the interpretive effort designed for them. Naturally, not all visitors will attend interpretation. We are not advocating that they do, only that they be provided the opportunity.

We can talk about accountability and pleasing the visitor forever, but the real benefit from this system will come from you and your staff spending the time in the field observing visitors in a systematic manner. The system can be used to evaluate on-going programs and determine where there is a need for expansion or change. Most importantly, it can get interpreters to acknowledge the visitors as individuals, catering to their interests and providing knowledge that is uniquely designed for them.

The methods described in this handbook provide a way to look at visitors to eliminate bias and stimulate thought. You will observe the following characteristics.

## Characteristics

*Observation Type* puts your data in context for comparison. It tells you who is participating in interpretation, who's not, and who's in the park.

*Time* helps you to identify program conflicts with other activities and patterns of visitor use. What are people doing during the time of your program?

*Day* may determine who's in the park according to weekday, weekend, and holiday use. Does visitation change within the week?

*Temperature* influences comfort. Comfort may influence participation in leisure activities such as interpretation.

*Other Environmental Factors* also influence comfort and therefore participation.

*Number in Group* provides group size. Large groups often don't seek out interpretive activities since many of their social and interpretive needs seem to be met within the group.

*Social Groups* often have different requirements and interests. Individuals take on certain roles depending on the group they're in. Are you catering to select groups and not to others?

*Origin* may imply cultural differences, language barriers, and differing interpersonal behavior. Each potentially affects interpretation.

*Special Populations* need consideration to reduce barriers (language, physical, and emotional) between them and the resource you're interpreting.

*Month* shows seasonal variations in visitor use for planning and staffing.

*Park Use* implies the visitors' familiarity or interest in the park. They may have visited the park before, suggesting the need for a changing program. If they are repeat visitors, do they already know the material you are presenting or, if they are first time users, can they understand the program context?

*Activity* lets you know what the visitors do while they're not attending interpretive programs. It indicates visitor interests that may expand or alter your program.

*Location* helps you find visitor concentrations and potential locations for interpretive activities. A program presented quite a distance from visitor concentrations does not attract the casually interested visitor who may not know what is going on.

*Interpretive Activity* gives you a breakdown, by activity, of attendance for certain program types. You can determine the costs of program types in relation to their popularity and function.

This handbook is divided into two sections: Method and Application. The Application section is more interesting and exciting than the Method. But the method is needed for the results. Therefore, we have provided as much as you should know to get results.

The Method section covers how to observe, when to observe, and what to observe. An appendix describes in greater detail materials needed for observation and collection.

The Application section asks questions, suggests



## Method

implications for data, and explains some examples from past work.

One final note before presenting this process—a number of people contributed to this effort. The most beneficial contribution was provided by the staff from the National Park Service areas that tested the system during the summer of 1978. We thank them.

### Observational Methods

The observational methods described here do not require OMB approval. You simply watch and record visitor group characteristics on a card. (A visitor group can be identified as those folks traveling together.)

Visitor groups are observed in three different situations as:

**Participants**—those visitor groups going to programs during the time you sample

**Non-Participants**—those visitor groups not attending the program, but located near the program area

**All Park Visitors**—those visitor groups that either pass by a point of sample (generally an entrance station or visitor center) or that you pass while traveling through the park

The observational methods compare data using either Participants and Non-Participants or Participants and All Park Visitors. Data gathered for each observational method is basically the same, only collection times and locations differ. The methods are used for different purposes and in different situations. You can use both, but usually one method or the other is best suited for a situation. You begin each method by observing Participants so you can understand who is using the interpretive activities. This Participant data is then compared with either Non-Participants or All Park Visitors, depending upon your park situation and how you want to use the data. You will need to decide which method is best for your park after reviewing the methods and your situation.

The Participant/Non-Participant method compares visitors attending with those not attending interpretive programs but in approximately the same time and place. This comparison will help you understand who your interpretive program is serving and who it is not serving. In addition, this method provides information on what the Non-Participants are doing and where they are located. This information can be used to select times, locations, and content for programs to reach the Non-Participants with data on everyone using the park. This allows you to determine if your Participant group is representative of the overall park population. Otherwise, you may be looking at only those visitor groups in the park during interpretive activities. You could be missing visitors who want interpretation.

The Participant/Non-Participant method is more

useful in small parks. A small park often has either a concentrated visitor area that is easily accessible or a low visitation that is easily counted. The main criteria for using this method is whether or not most visitor groups in the park will be counted if both Participant and Non-Participant data is collected.

Ft. Union was able to count every visitor group in the park during the time of the sample as a participant or non-participant.

The Participant/All Park Visitor method is generally used in larger parks when there is little opportunity to get non-participants. A large park is usually more diverse in its visitor concentrations and has enough visitors to be difficult to observe them during one observation period.

Observers at Arches were unable to travel to both ends of the park before the program was completed; therefore, the observer had to be careful not to count visitors returning from the program as Non-Participants.

Any park can use a combination of both methods and derive the benefits of both.

Rocky Mountain used the Participant/Non-Participant method for evening programs, observing Non-Participants in the campground. They used Participant/All Park Visitor with several guided walks that departed from roadside parking lots that were not near any other visitor concentration.

Before deciding which method to use, consider that the Participant/Non-Participant method compares data on folks visiting the park at the same time and in the same approximate location. For example, if young couples represented 50% of the Non-Participants and only 5% of the Participants, you may not be reaching the young couples in that area with that program.

On the other hand, the Participant/All Park Visitor method attempts to determine if the Participants are representative of the total park population. For example, if young couples at all programs represented 50% of the audience and 60% of the park visitation, you are probably addressing a representative portion of young couples.

You need to decide which method is best for your situation, or how to use a combination of the two. Please consider the following and then decide.

1. A small park has low visitation, making observation easy, or central visitor concentrations, making observation accessible.

2. A large park has high visitation, making observation difficult in a limited time, or diverse visitor concentrations, making observation locations difficult to get to.

3. The Participant/Non-Participant method compares visitors in approximately the same place and at the same time.

4. The Participant/All Park Visitor method compares visitors attending programs with everyone entering the park.

5. Both systems can be worked into one. You can collect Participant, Non-Participant, and All Park Visitor data and compare them.

We would suggest these methods for the following types of parks.

*Participant/Non-Participant:* Lyndon B. Johnson, Ft. Union, Canyonlands

*Participant/All Park Visitor:* Padre Island, Arches

*Combined Methods:* Rocky Mountain

The system used to collect this data involves not only selection of an observational method, but also recording the data on a card for fast accurate analysis. The card system is explained in detail in Appendix A.

**DECIDE WHICH METHOD IS BEST FOR YOUR SITUATION BEFORE GOING ON.**

## Sample Selection

The observation of selected parts of a total population is a sample. Sampling permits you to gather information about a total population while only looking at a few pre-designated cases. This saves time, money, and effort. In this case, you will sample interpretive programs.

Normally, you will sample every month during the first year the program is in operation. After the first year, sample selectively to address special problem areas, to see if program changes are achieving goals, and to monitor other changes in the visitor/interpretive program relationship.

## Selecting Programs to be Observed

Only a few interpretive programs are observed from each interpretive program type, therefore, those few must be carefully selected. When you implement the following steps, your sample should provide a reliable estimate of your population of Participants, Non-Participants and/or All Park Visitors.

1. Prepare a sampling schedule (refer to Example



of Sampling Schedule, page 9 ) as you prepare your monthly interpretive program schedule. Do this by listing each program type given during the month.

A program type is interpretation in the same interpretive category, given on the same time of day and in the same location. One program type is the evening program presented nightly at the amphitheater. Another is the exhibit area in the visitor center. To make sure you sample all programs being presented, we have broken program types into two categories: scheduled and continuous.

Scheduled programs are presented on a regular basis, although not given constantly. They are usually presented by an interpreter (i.e. evening talks, guided walks, living history scheduled three times a day).

Continuous programs are presented constantly during the day or so often as to appear constant to the visitor. They include most nonpersonal programs, as well as continual programs (i.e. self-guided trails, wayside exhibits, living history on a continual basis).

2. Now list the number of times each program type is offered each month. Scheduled programs are listed the actual number of times offered during the month (i. e. the evening talk at the amphitheater is presented 30 times in June). Continuous programs are listed the number of times they are offered during the month. For sampling purposes, we suggest listing by the number of two-hour blocks they are available 30 days, times 4 two-hour blocks [9am to 5pm] = 120 two-hour blocks.) This means your exhibits are "offered" 120 times during the month.

3. Use 2% as your sampling rate. Take 2% of the total number of times each interpretive program type is offered. This is the number of times you will sample that interpretive program during the month. Always round off the figure to the next highest whole number (i. e. .032 becomes 1).

To calculate sampling the evening amphitheater talk:

$$\begin{array}{lll} 30 \text{ programs} & \times .02 & = .60 \text{ rounded up to } 1. \\ (\text{times given} & (2\% \text{ rate} & (\text{number of evening} \\ \text{in June}) & \text{of sam-} & \text{amphitheater talks to} \\ & \text{pling}) & \text{sampled in June}) \end{array}$$

To calculate sampling your exhibit area:

$$\begin{array}{lll} 8 \text{ hours} & \div 2 \text{ hours} & = 4 \text{ blocks} \\ (\text{full day}) & (\text{sampling} & (\text{possible sampling} \\ & \text{block}) & \text{blocks per day}) \end{array}$$

$$\begin{array}{lll} 4 \text{ blocks} & \times 30 \text{ days} & = 120 \text{ blocks} \\ (\text{sampling} & (\text{in June}) & \text{sample in June}) \end{array}$$

$$\begin{array}{lll} 120 \text{ blocks} & \times .02 & = 2.40 \text{ rounded up to } 3. \\ (\text{possible} & (2\% \text{ rate} & (\text{number of two-hour} \\ \text{sampling} & \text{of sam-} & \text{sampling blocks} \\ \text{blocks}) & \text{pling}) & \text{scheduled for June}) \end{array}$$

Therefore, you sample two-hour blocks of the exhibit area three times in June.

4. All park Visitors are sampled in a similar manner to continuous programs. If your entrance station is open 10 hours each day, you will have potentially 150 possible sampling times.

$$\begin{array}{lll} 10 \text{ hours} & \div 2 \text{ hours} & = 5 \text{ blocks} \\ (\text{full day}) & (\text{sampling} & (\text{possible sampling} \\ & \text{block}) & \text{blocks per day}) \end{array}$$

$$\begin{array}{lll} 5 \text{ blocks} & \times 30 \text{ days} & = 150 \text{ blocks} \\ (\text{sampling} & (\text{in June}) & (\text{possible times to} \\ \text{blocks/day}) & & \text{sample in June}) \end{array}$$

$$\begin{array}{lll} 150 \text{ blocks} & \times .02 & = 3. \\ (\text{possible} & (2\% \text{ rate} & (\text{number of two-} \\ \text{sampling} & \text{of sampling}) & \text{hour sampling blocks} \\ \text{blocks}) & & \text{for June}) \end{array}$$

Therefore, you sample All Park Visitors 3 times in June by either observing visitors as they exit/enter the entrance station or as you travel through the park.

5. Now you need to select sampling dates. List programs the number of times each is to be sampled (2% of the total). Determine sample dates by using the random date table on page 33. Start by picking an arbitrary place on the table (close your eyes and drop a pencil on the numbers, select the closest date to the tip of the pencil). Write that date opposite the first program to be sampled. Continue down the list of dates, assigning a date to each program to be sampled.

6. If you have interpretive programs that are offered more than once on the days you have selected to sample, you need to determine which program will be sampled. Choose times or programs to provide data from a wide range of situations (i.e. use the first date for sampling the morning program, the next date for the afternoon program; or sample All Park Visitors once each in the morning, early afternoon, late afternoon).

## Example of Sampling Schedule

Master List	Number of Times to be Sampled	Dates	Times	
1	Visitor Center	1	June 14	9 - 11 am
2	Exhibit Area:	2	June 3	1 - 3 pm
3		3	June 27	3 - 5 pm
4	Evening Program	1	June 8	
5	All Park Visitors	1	June 17	3 - 5 pm
6		2	June 19	1 - 3 pm
7		3	June 26	9 - 11 am

7. Develop a master list of the programs to be sampled during the month by assigning each program a number (far left column). This will serve as a reference for later use by corresponding to a master card for each sample. You will be able to sort for selected programs at any time by knowing the month and the assigned number.

## Data Collection

### Before Data Collection

1. Decide on an observational method.
2. Prepare a master list of programs to be sampled.
3. Randomly select a sample of programs.
4. Assign and train a specific individual or individuals to collect observations. Remember, you can collect the data yourself.

Rocky Mountain used their park librarian, A YACC, to collect observations.

Canyonlands used SCA's and seasonals.

Ft. Union used a VIP.

The interpretive technician and interpreters at Padre Island collected data.

The mule skimmers and bus drivers at LBJ collected data.

The district ranger and ranger/interpreter collected data at Arches.

5. Review the appendices in the back of this handbook to familiarize yourself with Keysort and the Variable Definitions.

### Guide to Data Collection

The Observation Guide on page 11 will give specific direction to implement the two observational methods.

The top half of the guide provides details for the Participant/Non-Participant method and the lower half addresses the Participant/All Park Visitor method. Information is given on where, who, and when to observe. Example situations are also provided.

### Guidelines for Observers

1. Wear civilian clothes when observing.
2. Select observation locations where you can easily observe all social group members, but not be obvious.
3. Answer any questions politely, but keep observing.
4. In most cases, it's possible to be an interpreter and an observer at the same time. Only at parks where all populations are visible during the time of the program and the number is small, might the interpreter be able to do both.

The interpreter at Canyonlands found this simple to do in the evening because of the small number in the campground and the location of the program.

5. Enter any special comments on the back of the card (i.e. type of physical handicap observed, overheard reason for not going to the interpretive program).

6. After collecting data, return to the office and edge punch the holes adjacent to the items you marked during observations. One person may be appointed to punch and check all cards.

Canyonlands and LBJ used office staff to punch the cards. Where this is done, make sure your cards are legible before you turn them in.



## Participant/Non-Participant Method

	Where	Who	When	Stop
<b>Participants</b>	Collect the observations at the interpretive program site where all groups arriving can be easily observed.	Observe all social they arrive to take interpretive program.*	groups as part in the For scheduled interpretive programs, arrive at the site 45 minutes prior to the start of the program. For continuous interpretive programs, observe for one hour, beginning at an assigned time.	At the end of one hour or the beginning of the interpretive program, stop observing.
<b>Non-Participants</b>	Collect observations in all visitor concentration areas easily accessible to the interpretive program sites, or where you can see a decision being made, such as a tour ticket desk. If you look at a map of your area, visitor concentration areas are usually obvious. We suggest traveling to as many concentrations as possible, while staying close to the program site.	Observe all social taking part in the program.	groups not interpretive Begin observing non-participants when the interpretive program starts, or for continuous programs, begin at assigned times (usually the second hour after collecting participants).	When you have completed your route past all the groups in the approximate area, stop observing.
<b>Example</b>	At Padre Island, Non-Participants were collected during an evening program in the campground. LBJ collected Participant and Non-Participant data at the same time at the tour desk where visitors picked up tour tokens. At that point the decision to participate or not to participate was obvious.			

## Participant/All Park Visitor Method

<b>Participants</b>	Collect the observations at the interpretive program site where all groups arriving can be easily observed.	Observe all social they arrive to take interpretive program.*	groups as part in the For scheduled programs arrive at the site 45 minutes prior to the start of the program. For continuous programs, observe for one hour, beginning at an assigned time.	At the end of one hour or the beginning of the interpretive program, stop observing.
<b>All Park Visitors</b>	Collect observations at a location where most visitors will pass (i.e. entrance station) or collect the sample as you move through the district, unit, or park, traveling to all visitor concentration areas.	Observe all social encountered.	groups Observe for two hours beginning at assigned times	At the end of two hours stop observing
<b>Example</b>	At Arches, All Park Visitors were collected at the entrance station. At Chickasaw NRA the Platt Unit was traveled from one end to the other sampling all visitor concentration areas.			

\*For example, you estimate about 200 people will take part in a program. Past experience tells you there will be an average of 4 persons per group, giving you an estimate of 50 social groups. You think you can observe 25 groups per hour, so you will need a second

observer to collect an observation on each group. (Experienced observers can probably observe 50 groups per hour, but it may take practice to attain that level.)

# Application

If you've started thinking of all the possible comparisons you could make between variables, you can see it's quite a list. Our purpose here is to show you a few major comparisons that will be helpful in most park situations. Generate other questions to answer any park specific questions you might have.

The data is most useful when analyzed according to Observational Method. Comparisons should be made in the context of Participant/Non-Participant or Participant/All Park Visitor. Either method will tell you about Participants. Participant/Non-Participant allows you to compare Participants with visitors nearby, but not participating. Participant/All Park Visitor tells you how users of the interpretive program compare with overall park use.

Begin by sorting your data into two stacks, either Participant/Non-Participant or Participant/All Park Visitor. Then answer the following questions by continuing to sort for the variables described and placing the data into tables.

Tables can be developed by counting the number of cards for a selected variable using the Keysort system. The tables suggested here are developed by sorting and counting each variable below (i.e. sort for Social Group in both Participants and Non-Participants).

Social Group	Participants	Non-Participants
Alone		
Young Couple		
Middle Couple		
Old Couple		
Peer Group		
Nuclear Family		

## Data Application

### Participant/Non-Participant Analysis

(Sort for Social Group in both Participants and Non-Participants, as set up in the table example above.)

\*Is the distribution of Social Group among Participants the same as among Non-Participants?

If a difference exists, who is the program serving who is not represented? Interpretive activities might be redesigned or added to broaden appeal to social groups not represented.

In many parks' interpretation, nuclear families generally represent a high proportion of participation as opposed to non-participation. Can you broaden the appeal? Extended families and multifamilies quite often do not come to interpretive programs and seem content in their own social group.

(Sort for Time, Day, and Month in both Participant and Non-Participant.)

\*How do Participant/Non-Participant ratios vary with time (during day, during week, during season)?

Low Participant rates during certain times should encourage you to change times, days, or seasons. Are temperatures and environmental factors having a detrimental effect on your program? Can you make the situation comfortable?

Park visitors seek out interpretation at convenient, comfortable times. You need to know typical visitor schedules and mesh this with your interpretive schedule.

(Sort for Activity and Location in Non-Participants.)

\*What are Non-Participants doing and where are they during interpretive activities?

Activities and Locations should give you a good idea of what the Non-Participant is interested in. Can you develop a program on that interest or in that location?

Evening campground strollers might be offered an evening wildlife observation walk, or a roving interpreter.

(Sort for Social Group in Interpretive Activities among Participants.)

\*Does Social Group distribution vary among Interpretive Activities?

Certain interpretive program types have a limited appeal to some Social Groups. Review your program to ensure persons seeking interpretation to have alternatives.

Long hikes may attract few Older Couples.

Evening programs attract few Peer Groups.

(Sort for Time, Day, and Month in Social Group among Participants.)

\*How does Social Group among Participants vary with Time (during day, during week, during season)?

Time/Social Group relationships might suggest time changes or altering program format and content.

Families with young children are less likely to attend late evening programs. Families attend less frequently during the week.



(Sort for Origin in both Participants and Non-Participants.)

\*What is the distribution of Origin among Participants and Non-Participants?

If differences exist, your program may be presenting cultural barriers. Is language a barrier? Do different Origins have different activity interests? Do you publicize and present programs in ways and where different origins could attend?

Interpretation generally seems to be a white, middle-class American phenomenon.

(Sort for Special Populations among Participants and Non-Participants.)

\*What is the distribution of Special Populations among Participants and Non-Participants?

Interpretive programs often present physical or social barriers to participation for non-English speaking park visitors and persons with mobility or other handicaps. If special populations are represented among the Non-Participants, have you attempted to eliminate barriers?

Acknowledge the handicap by offering help where needed, i.e. "We'll have ramps at each stop along the bus route to help you on and off."

### *Discussion*

This method will show differences between the Participant and Non-Participant. Once these differences are acknowledged, you can make changes which adapt your existing program to your visitor. These changes may include placing more emphasis on a successful program, providing programs at different times and locations, or experimenting with new programs for groups not reached by interpretation. The results of this study should also provide the basis for cost benefit analysis of your program. Not only can you provide numbers associated with particular interpretive program types, but you will be able to comment on how the programs fit into the overall interpretive effort for visitors.

### *Participant/All Park Visitor Analysis*

(Sort for Social Group in both Participant and All Park Visitor)

\*Is the distribution of Social Group among Participants the same as among All Park Visitors?

If a difference exists, who is the program serving, who is not represented? Are interpretive programs available and attractive to those persons not served?

Remember you are dealing with ratios, not actual numbers here.

Older couples are found in the park but not as frequently at interpretive activities. They may retire early in the evening or have a hard time hearing you. Are you telling them anything worth coming to hear?

(Sort for Activity and Location in All Park Visitors)

\*What are All Park Visitors doing and where are they located?

Visitors generally concentrate at major interest points or service centers. Do your publicity and program efforts take advantage of this?

A visitor can't attend a program if she/he doesn't know about it!

(Sort for Origin in both Participants and All Park Visitors.)

\*What is the distribution of Origin among Participants and All Park Visitors?

If a difference exists, your program may not be available on topics other Origins can make use of. The program may also present cultural barriers. Other origins are often found in the park, but are seldom participating in interpretation. If you have a population not represented, contact someone or a group that can help—you might have a staff member or hire one to help provide adequate interpretive services for these visitors.

(Sort for Special Populations in Participants and All Park Visitors.)

\*What is the distribution of Special Populations among Participants and All Park Visitors?

Interpretive programs often present physical or social barriers to participation for non-English speaking park visitors and person with mobility or other handicaps. If Special Populations are represented among All Park Visitors, have you attempted to eliminate these barriers. Are programs available at locations suitable for Special Populations?

Once again, let the visitor know you help by symbols or verbal communication.

(Sort for Park Use in both Participants and All Park Visitors.)

\*Is the distribution of Park Use among Participants the same as among All Park Visitors?

Many interpretive programs seem to serve the first time, out-of-state visitor best. Does your program appeal to the repeat or local visitor? This can not only help to build a strong local constituency, but may also address the visitor

populations responsible for most incidents.

Variety may be the spice of life, especially for repeat visitors. Quite often the repeat visitors are also repeat users of interpretive programs. Also, most visitors are proud of their home; comments on their state (from license tags) can make the program more personal.

### *Discussion*

This method shows differences (if there are any) between the Participant and All Park Visitor. These differences may suggest times and locations when you might reach the visitors not in the park during interpretive programs. Although the above comments may seem to be directed at providing interpretation for everyone, we do not advocate that all visitors must attend. We're simply advocating that most visitors should have an opportunity to attend interpretive activities responsive to their needs. This is your job, to provide the most effective interpretive effort to support resource management and to get the most out of budget dollars.

### **Future Possibilities**

#### *Generating New Questions*

The process of answering the questions in the previous sections has probably raised more questions about your park visitor. Some of these may not be answerable through this system of visitor observation. However, through additional informal and formal research programs you can continue to expand your understanding of park visitors.

You can address questions your data have raised through directed observation or informal conversation. For example, if your data shows older couples are not attending your evening programs, make it a point to observe what they're doing during those program times or to talk with them. You can ask, within a conversation, how your program can serve the needs of park visitors like themselves.

Formal research projects can be designed to handle broader questions. For example, your data might have shown few minorities attending interpretive programs, although many were in the park during the programs. You may choose to develop a research project which studies minority cultures to determine if interpretation can be of interest to those cultures,

and what modifications are needed. Some of your questions might also be incorporated into other research studies. If you have special questions, you can integrate them into a different study. Data from your visitor observations may facilitate other studies or direct research efforts.

### *Use With Other Data Systems*

The strength of your data can be increased by combining it with other available information. Monthly and annual public use reports give total numbers of visitors participating in certain activities. Your visitor observations can tell you approximate percentages of handicapped and minorities being served, in relation to total numbers.

The Park Visitation Census now being proposed for future Servicewide use is designed to use age, social group, origin, and special population breakdowns similar to those you've collected. Your data and the census will permit you not only to understand who is doing what, but also how many activities, interpretive and otherwise, they're involved in and in what order they're doing them.

Extending your data through other systems has an obvious pitfall. The data will not always be comparable. Just remember that the purpose is not to make statistical summaries, but to gain insights on visitation and to provide better interpretive services.

### *Sell Your Program/Support Your Decisions*

Combined with staff and budget information, your visitor observations can give you relative costs to provide interpretive services and to communicate with visitor groups.

Requests for new programs or staff can be supported with data pointing out a clientele not being served or a time when visitors are present and staff are not available to provide interpretive services.

### *Statement for Interpretation*

Finally, your visitor observations will give you data to "fill in the blanks" in the visitor use portion of the Statement for Interpretation. After you've collected data for a year, you'll be able to provide most of the needed information for Visitation Analysis.

Remember, when the Statement for Interpretation is reviewed by those above, it can be a valuable tool for you, reflecting changes and needed responses.



Identifying visitor characteristics for interpretation is a step toward understanding the role and function of the interpretive process. The action of incorporating these answers into your programming efforts is your responsibility. The techniques suggested in this report require a commitment of time, thought, and action. Sampling reduces the time commitment while providing reliable data. Answering the suggested questions and reviewing the implications provide a stimulus for thought about your own interpretive situation and a basis for action.

Properly applied, the process suggested in this report will provide:

1. a firsthand look at visitors as they relate to the park and specifically to interpretation,
2. data, systematically collected, which you can use to make interpretive programming decisions, and
3. a basis for intergrating other data systems into interpretive programming.

### Keysort System

The keysort system allows you to record your visitor observations on a printed card, to store the data on the card indefinitely, and to retrieve your data from the card, quickly, without a computer.

#### Recording Observations

Observe the visitor groups and mark the box identifying the characteristics you observed. When necessary (i.e. comment, environmental factor, special population, origin, other), write any comments you might have about the variables you observed or couldn't observe, on the back of the card in the space provided.

### ***Storing your Observations***

When you return to headquarters, use the edge punch to notch the observed characteristics.

### ***Retrieving your Data***

To sort the cards, stack all cards and drive the Keysort needle through the desired hole. The punched cards will fall out. The cards that are not punched will stay in the stacks. After dropping out the punched cards for each variable, count the number of cards and record it in your table for analysis (See page 13)

Record on the back of one card in each sample (Participant, Non-Participant, or All Park Visitor) the information requested about the sample. This is the Master Card.

Once the data has been punched, you can group all cards together for storage until you are ready for analysis

**front**

**back**

[illegible]

NATIONAL PARK SERVICE  
VISITOR OBSERVATION  
FOR INTERPRETATION

NUMBER

DATE \_\_\_\_\_

**TITLE OF PROGRAM**

TYPE OF PROGRAM

**LOCATION**

NAME \_\_\_\_\_

ORIGIN (WRITE IN NUMBERS)

☐ BLACK  
☐ SPANISH-AMERICAN  
☐ NATIVE-AMERICAN  
☐ ORIENTAL  
☐ OTHER

SPECIAL POPULATIONS (WRITE IN NUMBERS):

☐ NON-ENGLISH SPEAKING  
☐ PHYSICALLY DISABLED  
☐ SENSORY DISABLED  
☐ MENTALLY DISABLED

### COMMENTS



## Appendix C

---

### Variable Definition

Variables are groups of items on each card that are to be checked as observed. The front and back of the card have variables relevant to each visitor group observed, therefore, complete as many as possible with each observation. Remember, one card per visitor group is completed. Usually you will check only one item per variable in the appropriate box (exceptions are explained).

Variables are described according to their position on the card.

---

#### Top Front

---

#### Observation Type

\*Participant. A social group attending an interpretive program.

\*Non-Participant. A social group not attending the program but has had the opportunity to know about it and is still nearby. (It is difficult to define near for every situation, therefore, you must use your judgement to sample visitor concentration areas that you consider nearby.)

All Park Visitor. A social group using the park.

\*If some in a group are Participants and others are not mark both Participant and Non-Participant and note the number of each on the back of the card, in Comments.

#### Time of Day

Morning. Before noon.

Afternoon. From noon until sunset.

Evening. After sunset.

#### Type of Day

Weekday. Monday through Friday, but not a holiday.

Weekend. Saturday or Sunday, but not a holiday nor a holiday weekend.

Holiday. Official holiday, including locally designated holiday (non-business weekday) and associated weekend days.

#### Temperature

Estimated outside temperature in degrees Fahrenheit.

### Environmental Factors

Environmental factors which may influence the attendance or presentation of a program. Check this box when necessary and note on the back the type of factor (i.e. mosquitoes, winds, rain, gnats)

---

#### Left Front

---

#### Interpretive Activity

These categories are the same as those used for zero budgeting and the Statement for Interpretation.

**Walks/Tours.** Interpreter-led walks and tours requiring visitors to move from location to location.

**Talks.** Interpreter presentations often using a lecture format with the audience normally seated. May use audio-visual support, but few actual objects.

**Self-Guided Tours.** Visitor guided from location to location by a non-personal means of interpretation (written or recorded messages).

**Other Non-Personal.** Interpretation provided through non-personal media such as exhibits, audio-visual media, and signs; generally not requiring extensive visitor movement.

**Assigned Station/Roving.** Either an interpreter is stationed at a point in the park for the purpose of giving information/interpretation or is assigned to randomly move throughout an area providing information and interpretation.

**Historic Demonstrations.** Interpretation of historic craft, practice, event, etc. using objects and normally in period costumes.

**Recreation Demonstrations.** Interpretation of park resource-based recreational activity using actual objects.

**Presentation.** Program by performing artists.

**Environmental Education.** Formal education program in the park, normally for school groups.

**Outreach.** Out-of-park interpretive programs.

#### Location

These seven spaces are left blank except for letters A through G to code as you wish for locations in your park. Suggested locations to develop a key for are:

- A) Campgrounds
- B) Lodges
- C) Recreation Areas (lake, picnic grounds)
- D) Interpretive Areas (trails, visitor center)
- E) Back Country (by road, unit, or district)
- F) Support Services (store, gas station)

It is important that you develop these codes for your park or district before sampling begins and use the same code throughout all sampling. It is also important that they are relevant to the sample. Think about the relationships between interpretive programming and location.

#### Activity

If part of the group is doing one thing and part another, mark both and note on the back of the card, in Comments.

Maintenance. Meals, setting up or taking down camp, food preparation, clean up.

Relaxation/Resting. Reading, passive games, sleeping, talking.

Recreation. Active games and park resource-based activities such as swimming and hiking.

Travel. Movement in some vehicle that can't be directly classified as a recreational activity.

Sightseeing. Movement by vehicle for the purpose of seeing the park.

#### Park Use

Mark each applicable category. You will have to listen to conversations, look at license tags, guest registers, etc. to get this information. Whenever possible make comments about the group (i.e. group divided).

Repeat. Those visitors who have been to the park before. (Make comments if you know when they last visited or how often)

First Time. Those visitors who have not been to the park before.

In-State. Residence in the same state as the park. (May be obtained from license tag of vehicle.)

Out-of-State. Residence in another state.

#### Bottom Front

---

#### Master

Only one master card should be completed for each sample (Participant, Non-Participant, or All Park

Visitor). It will serve as a reference of all your sampling. Mark the first card in each sample and complete location, date, and program detail on the back.

#### Months of the Year

Mark the appropriate month.

#### Comment

Note if some unusual conditions or observations may influence interpretive programming. Write them on the back in as much detail as possible. Include the suggested variable information and other detail such as an overheard conversation or volunteered comments. Be sure to notch "comment" on the front of the card.

#### Right Front

---

#### Age and Sex of Each Group Member

Record the number of group members in each age category according to sex (i.e. if there were two male senior citizens in the group, record a 2 in the lower lefthand box).

#### Number in Group

The blanks are numbered 1 - 6 to fill in the total number of visitors in the group. If the number is over 6, write in the total.

#### Social Group\*

Alone. One person, not visibly associated with a group.

Young Couple. One male, one female; approximately the same age—under 25.

Middle Couple. Age 25 to 65.

Old Couple. Over 65.

Peer Group. Two or more persons, approximately the same age, not meeting other group criteria

Nuclear Family. Mother, father, and children

One-Parent Family. One parent with children

Extended Family. A family with other family members, (i.e. grandparents, other relatives).

Over One Family. More than one family group.

Usually obvious by more than one set of parents



\*If a group is sampled (one woman, 25-65, and one boy, 13-19=single parent family) and you later realize it is part of another group (one man, 26-65, and two girls, 13-19), go ahead and redo the card (1 man, 1 woman, 25-65, plus children = nuclear family).

## Origin

If it is a group of mixed origin then check both categories and record the numbers on the back of the card.

Anglo-America. A caucasian inhabitant of the United States. Other. (See back of card).

## Special Populations

Check this box if there are any noticeable special characteristics for anyone in the group (see back of card).

## Sample Number

The next eight boxes are marked to permit numerical ordering of programs sampled by month. For example, the first program you sample is a Talk on Tuesday, June 3. After marking June on the bottom of the card, you will mark this '1'. If you do a Non-Participant sample also, number this '1'. The next program being sampled should be clipped '2'. At the beginning of the month start numbering again. These numbers should be designated when determining the schedule so everyone will be on the same system and so they will correspond with the master list.

To record this number, four holes are used for each set of numbers from 0 - 9. These four holes are assigned the values of 7, 4, 2, 1. By notching either a single number or combination of numbers any number from 0-9 can be expressed. Two sets of numbers are provided, the ones, marked 7, 4, 2, 1; and the tens, marked 70, 40, 20, and 10. Using combinations of both sets permits 99 samples to be numbered each month.



## Blanks

Blank spaces are provided for your use. You will need to determine what additional variables you want to collect (some interpreters wanted vehicle type), then list the categories you want marked (i.e. auto, van, pickup camper, travel home, trailer, other). These must be standardized before observation begins and each observer must use the same categories.

## Back

## Environmental Factors

Fill in the blanks with any factors influencing program attendance or presentation (usually negative factors, like mosquitoes).

Canyonlands cited wind and insects as seasonal problems.

Padre Island cited shark infestations as an occasional problem.

LBJ cited wet pavement as a problem for their horse-drawn freight wagon tours.

## Comments

Fill in the blank with special remarks and comments about the group (i.e. Did the group split up? Were there any special characteristics? Did you overhear any comments that might help?).

## Origin

Fill in the number of people per item.

Black. Persons with dark colored skin.  
Spanish-American. Persons of Hispanic descent.  
Native American. Includes American Indians and Eskimos.

Oriental. Includes Japanese, Chinese, etc.

Other. Write in the nationality you believe the visitors are. (You may overhear a comment or recognize a language.)

## Special Populations

Fill in the number of visitors per item.

Non-English Speaking. Overheard conversation



entirely in a foreign language.  
Physically Disabled. Mobility handicap (i.e., wheelchair, braces).  
Sensory Disabled. One or more of the senses severely impaired (unable to hear, speak, or see).  
Mentally Disabled. Lacking some normal mental function (mentally retarded).

### Master

A master card must be filled in for each sample, but only one is needed per sample (Participant, Non-Participant, All Park Visitor). It will be used in the future for referencing particular programs and should correspond with the information on the master list. Mark the front Master variable and complete the following on the back of the card:

Number. The number assigned the program when scheduled for sampling.

Date.

Title and Type of Program. The advertised title and description of the program.

Location. Where the program was presented.

Name. Name of individual taking the sample.

### Bibliography

*Interpretation for Handicapped Persons: A Handbook for Outdoor Recreation Personnel*  
Jacque Beechel. 1975

*Visitor Groups and Interpretation in Parks and Other Outdoor Leisure Settings*  
Donald R. Field, J. Alan Wagar. 1973

*Interpreting Parks for Kids—Making it Real*  
Gary E. Machlis, Donald R. Field. 1974

*Children's Interpretation: A Discovery Book for Interpreters*  
Gary E. Machlis, Maureen McDonough. 1978

*Interpretation for Retired Park Visitors* (forthcoming)  
Renee Renninger.

Order publications at the following address:

National Park Service  
Cooperative Park Studies Unit  
College of Forest Resources  
University of Washington  
Seattle, WA 98195

*Keysort Notching and Sorting Manual*  
Litton Business Systems, Inc. 1975

Order this publication from the following address:

McBee Systems  
Division of Kimball Systems  
Route 50 East  
Athens, Ohio 45701

## Appendix E

Table of Random Dates

23	30	5	29	14	3
7	31	15	22	2	4
10	13	8	21	11	24
25	1	9	17	16	6
31	16	15	29	6	9
18	23	17	26	2	13
28	8	5	10	11	20
21	4	28	1	27	7
10	11	14	13	22	12
31	6	29	3	25	21
7	17	24	15	9	30



# VISITOR OBSERVATION

Part. Time Part	Non-Part	All Forest Visit	MORNING	Aft. NOON	EVE. NING	Week day	Week end	Holi day	Less 60°	60° 90°	over 90°	ENV FACTORS					
<div style="display: flex;"> <div style="flex: 1;"> <p>Walks / Tours</p> <p>Talks</p> <p>Self-guided Tours</p> <p>Other NON-personal</p> <p>Attended Station / Rowing</p> <p>Historic Demonstration</p> <p>Recreation Demonstration</p> <p>Presentation</p> <p>Environmental Education</p> <p>Outreach</p> </div> <div style="flex: 1; text-align: center; font-weight: bold;"> Interpretive Activity </div> </div>						M	F										
								INFANT 0-3									
								CHILD 4-12									
								TEEN 13-17									
								Young Adult 18-25									
								Adult 25-65									
								Sr. Cit 65+									
												Number in Group					
<div style="display: flex;"> <div style="flex: 1;"> <p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>E</p> <p>F</p> </div> <div style="flex: 1; text-align: center; font-weight: bold;"> Location </div> </div>						Social Group		<p>Alone</p> <p>Young Couple</p> <p>Middle Couple</p> <p>Elderly Couple</p> <p>Peer Group</p> <p>Nuclear Family</p> <p>Single Parent Family</p> <p>Extended Family</p> <p>Over 1 Family</p> <p>Organized Tour</p>									
<div style="display: flex;"> <div style="flex: 1;"> <p>Maintenance</p> <p>Relax / Rest</p> <p>Recreation</p> <p>Travel</p> <p>Sightseeing</p> </div> <div style="flex: 1; text-align: center; font-weight: bold;"> Experience </div> </div>						ORIGIN		<p>American Indian</p> <p>Black</p> <p>Hispanic</p> <p>All other races</p>									
<div style="display: flex;"> <div style="flex: 1;"> <p>Repeat</p> <p>1st Time</p> <p>In State</p> <p>Out-of-State</p> <p>Developed</p> <p>Dispersed</p> </div> <div style="flex: 1; text-align: center; font-weight: bold;"> Forest Use </div> </div>						SPECIAL POPULATIONS		<p>Special Populations</p>									
						SAMPLE NUMBER		<p>70</p> <p>40</p> <p>20</p> <p>10</p> <p>7</p> <p>4</p> <p>2</p>									



VISITOR OBSERVATION FOR INTERPRETATION  
U.S. FOREST SERVICE  
EASTERN REGION

Number

Date

Title of Program

Type of Program

Location

Name

Origin: Write in numbers

ENGLISH SPEAKING

NON E.S.

Black

Hispanic

Oriental

Native American

Other Races

Special Populations: Write in number

Physically disabled

Sensory disabled

Mentally disabled

Comments:

## SUPPORTING STATEMENT: Forest Visitation Census

### A. Justification

1. In Section 2, Findings of Public Law 94-588 National Forest Management Act of 1976, Congress finds that -

"(3) to serve the national interest, the renewable resource program must be based on a comprehensive assessment of present and anticipated uses, demand for, and supply of renewable resources for the Nation's public and private forests and rangelands, through analysis of environmental and economic impacts, coordination of multiple use and sustained yield opportunities as provided in the Multiple-Use Sustained Yield Act of 1960 (74 Stat. 215; 16 USC 528-531) and public participation in the development of the program;

and

"(4) the new knowledge derived from coordinated public and private research programs will promote a sound technical and ecological base for effective management, use, and protection of the Nation's renewable resources;

and

"(6) the Forest Service . . . has both a responsibility and an opportunity to be a leader in assuring that the Nation maintain a natural resource conservation posture that will meet the requirements of our people in perpetuity;

From these findings it is evident that Congress expects USDA-Forest Service to assess present and anticipated uses, to develop new knowledge from research programs, and meet future needs of our people.

This kind of information - particularly related to visitor use of forest resources can NOT be gathered without asking people questions about what they are doing now and what they would like to do in the future. It is essential to good planning for the benefit of our nation's people that we know who is using the Forests, what they are doing while on the Forest, what experiences they are seeking, and why these experiences/activities are important. This kind of information can only be gathered by asking Forest users questions and is usually not received in response to proposed USDA-Forest Service actions.



2.

This kind of basic visitor use information defines trends which allow development of visitor use opportunities that meet the requirements of Congressional findings expressed in PL 94-588.

We are required by law to do the planning. We are unable to gather the base data we need to do adequate recreation planning without asking Forest users direct questions. OMB approval is required to ask questions. We are asking for OMB approval to do what Congress has told us we must do for the benefit of the people.

2. The data will be used by the Forest interdisciplinary Land Management Planning team to formulate recreation opportunities and programs for the Forest user.
3. Similar data is unavailable because past OMB approval has not been secured.
4. NA

#### B. Description of Survey Plan

1. Respondent Universe - Potential Respondent Universe is all recreation users to R-9 Forests. In FY 79 that total was 20,204,500 visitor use days for developed and dispersed recreation.
2. No pretests are planned. A similar system has already been used by another Federal land managing agency (OMB No. 42R 1453).

Sampling plans may vary from Forest to Forest depending on physical difficulties in contacting people and past visitation records. Generally, the Sample plan will provide for people to be contacted proportional to total use by month and location within the Forest. After proportions have been set, interview contacts with visitors are randomly assigned to the days of the month for each census location. The sampling plan will/must be followed. Additional interviews at a given site will not improve the sample. Normally, 400 interviews per Forest per year could be expected. Interviews will also be spread to cover all hours of visitor use.



3.

3. Dr. Kenneth Hornback, Statistical Office, Denver Science Center, National Park Service.

4. NA

C. Tabulation and Publication Plans

1. Publication and tabulation will be in the Forest Land Management Plan or as annual supplements to the LMP.

D. Time Schedule for Data Collection & Publication

1. Time schedule will be continuing if possible since the intent is to gather data to define trends and changes in visitor use trends to advise Land Management Planning. Reports should be done annually to verify or alter previous trends but may be done every 3-5 years if trends appear to be holding after the first 3 years.

2. Results should be available within 3 months of the end of the year.

E. Consultations Outside the Agency

1. Dr. Kenneth Hornback, Statistical Officer, Denver Science Center, National Park Service. No major problems were encountered.

2. NA

3. NA

F. Estimation of Respondent Reporting Burden

1. From previous experience, this census should require about 2-4 minutes to administer once a person has limited experience and instruction. We have allowed 6 minutes in our estimate.

2. No time will be required by the public in data compilation.

3. NA

G. Sensitive Questions: - NA

H. Estimate of Cost to the Federal Government

1. Cost for the Region should run about \$35,000 per year or \$2,500 per Forest per year.

## FOREST VISITATION CENSUS

The Forest Visitation Census is part of a program for MONITORING public use. The visitation census is not a study. It is a scientifically designed, cost effective means to discover limited information about people who use the National Forests. These data can be stored and "on call" through a computer program built to facilitate access by planners, managers and staff.

### Monitoring vs Studies:

1. Monitoring is concerned with change; studies are concerned with relationships.
2. Monitoring gives results unique to the site; studies give general findings.
3. Monitoring is work the Forest can do for itself; studies are done by specialists.
4. Studies can gather detail that monitoring cannot do cost effectively.
5. Monitoring yields valuable data about trends and comparisons which studies cannot do cost effectively.

Forest Visitation Census data should be compatible and supplemental to RIM data. It is a way to gather information necessary for adequate VIS, Recreation, and LMP planning which is not currently available.

Stops are encoded from the specially prepared Forest map. Activities are entered by Code. Certain activities may require further elaboration like hiking, backpacking, boating.







**INTERVIEW LOCATIONS** Wherever possible, the best location for interviews is at an exit station that is occupied during the normal interview period and has an area where vehicles can be safely stopped without obstructing traffic. The census can be used for on site interviews but must be specially designed for this purpose. Appendix B covers the differences between what is described here and the on site interview procedure.

**FILLING IN THE BLANKS** Be careful to make your printing as clear as possible. Key punch operators have real problems with confusing print that makes 8 look like 3, or 7 like 2, or 1 like 6, or 7 like 1, or 7 like 9, or 5 like 6.

**CLOCKS** Clocks have been provided to register time and avoid confusion. Our convention is that any time between one minute and fifty-nine minutes after the hour is recorded on the hour--no rounding up or down is to be done. If you do an interview at eight:forty-five, the time recorded is 8. If a visitor first entered the park about four:fifteen, the time recorded is 4. Record time by circling the hour inside the clock face. The numbers 13 to 19 outside the clock are for keypunching. If you conduct an interview at some time before the 8 AM to 7 PM range of the clock enter the time by writing 99 on the clock face.



**DATES** When you ask about the date of entry on the Forest, you will often hear vague responses like "a couple of days ago," "about the middle of last week" or "last weekend." You need to clarify this with people. Appendix C is a small calendar which can be cut out and taped to your clipboard. Refer to the calendar and prompt visitors by saying, "would that have been Tuesday the 3rd?" (Or words to this effect.)

Enter number of MALES	0 4	5-14	15-24	25-39	40-64	65+
and FEMALES						

**OBSERVING PEOPLE** To minimize the reporting burden on visitors we have elected to observe rather than ask about certain things. Age and sex numbers are recorded in the box at the left. You need to count the number of visitors who appear to be of the sex and age categories listed. Attendance by special populations is important to know for physical planning and designing public involvement programs.

01	Caucasian	Special Characteristics	01. Phys. H'cap
02	Nat. Am. Indian		02. Sr. H'cap
03	Hispanic		03. Ment. H'cap
10	Black		04. Infants
			05. Elderly

**OBSERVING MATERIAL** Engineering and design work that will be done from time to time requires information about what people do and what they use while on the Forest. Vehicle type means the nature of the prime mover rather than anything which may be in tow. PU means pickup. SW is stationwagon. ORV is off-road vehicle (dune buggy, jeep, and related). Camper, -PU, -VAN means any vehicle rigged or modified for sleeping other than a motor home. Everything in tow is considered EQUIPMENT, eg. a dune buggy is not listed under VEHICLE if it is in tow even though it is a prime mover when in use. Equipment may be inside the vehicle and plainly in view or it may be mounted on top or behind.

Vehicle Type:	10. Bicycle	03. Motor Home	01. Sedan, PU, SW
	02. Camper, -PU, -VAN	04. OPV	
	08. Motorcycle/bike	17. Pedestrian	20. Other _____

Equipment Type:	07. Bicycle	04. Fishing Gear	02. Powerboat
	08. Camper-in-tow	03. Manual boat	01. Sailboat
	09. Campstoves, tents, chairs, coolers	05. ORV in-tow	20. Other _____

\_\_\_\_\_ Total number of axles (vehicle PLUS in tow).

Write in the number of axles of the prime mover and towed equipment.

**PASS THRU VISITS** The following page describes how to record the many different ways people use the Forest. Some visitors may say they are "just passing through." For our purposes, a pass thru is recorded only if no stops were made on the Forest.



## GOING & DOING: NOTATION SYSTEM FOR FOREST VISIT

A simple notational system has been developed to record the visit to the Forest. Using codes from the Forest map and the census form itself, the boxes, hexagons, and circles enable us to record how the visitor uses the Forest. As we study your findings we will search for the prevalent types of visit and consider how to serve the visitor more cost effectively and adequately.

**INTENSIVE DAY USE** Suppose a party entered the Forest this morning for a tour of only one day. Their concern may be to go everywhere rather than to do everything during their stay. Many of the things they do will not be of managerial interest because there is little which can be done in their behalf. Vague references to sightseeing, photography and related passive use are generally not recorded. What will be recorded has been determined by the Forest staff in terms of the major items of interest. The same is true for the stops on the Forest map. The stops listed are major areas of resource management interest. If a visitor says he/she stopped at the bend of the road to walk the dog, don't look for codes. However, do keep on the lookout for back and forth travel on the same road because this is important data for traffic studies.

The following is an example of a typical day use trip and how it was coded: "We just came in this morning (today is 01, on our way to California, ya know. Went to the information center (the visitor center stop is 16, the activity of going there is 23) to buy some books. Then we went up to watch the bears at Pike (map location is 14) but there weren't any (wildlife observation is 63). We stopped for lunch (picnic is 60) at Sweetwater (campground map location is 11. After lunch we spent the rest of the day at Pioneer Village (concession area map location is 19) and now we're on our way (no exit location code is used because that is recorded as an interview location)."

**Overnight:** on the FOREST When you hear the date the visitors entered the Forest you know if it is more than a day use visit. If the duration is greater than day use, be attentive to participation in interpretive programs and overnights stayed on the Forest. If they stayed overnight on the Forest, the last activity preceding a new day will be a camping code (probably a 73 or 74). Keep in mind that campgrounds and other areas may be used for a variety of purposes. People may picnic at visitor center parking lots or even sleep there in their cars. Be alert to these subtle conditions by listening to the logic of what you hear.

**OTHER OVERNIGHTS** The duration of stay may involve overnights at places nearby but outside the Forest. In addition, people may wander in and out of the Forest for supplies or other services. An exit, re-entry code is used in this case. See the example at the left. Note that one of the stop hexagons is empty because four activities have been recorded at the preceding stop. Again, no entry is made for the place people exit because that is automatically recorded as an interview location from the top portion of the census form.

on the Forest  
On the FIRST day  
What was your FIRST stop  
What did you do there

Box	01			
Stop	16	14	11	19
Activity	23	63	60	
Activity				
Activity				

on the Forest  
On the FIRST day  
What was your FIRST stop  
What did you do there

00 = Passthru  
98 = Next Stop  
99 = Exit, Reentry

Box	01			02		03	
Stop	16	14	11	19	16		
Activity	23	63	60		23		
Activity			73		73		
Activity							

on the Forest  
On the FIRST day  
What was your FIRST stop  
What did you do there

00 = Passthru  
98 = Next Stop  
99 = Exit, Reentry

Box	01			02				03	
Stop	16	14	11	19	16		11	17	
Activity	23	63	60		23	60		77	
Activity			99		63				
Activity					21				



## FOREST VISITATION CENSUS

**OMB Number**

You are not required to answer any of these questions. We would appreciate your cooperation to make the results of this census accurate and comprehensive.

The information will be used in planning to improve recreation and interpretive services for the public during their visit to the Forest. Your information will become part of a data bank against which we will measure to define trends in recreation use.

## A. SITE CHARACTERISTICS

**Location (circle)**

## Weather

## A -Clear & Hot

**B -Clear & Mild**

**C -Clear & Cold**

### D -Precipitation

**E -Overcast & Hot**

**F -Overcast & Mild**

**G -Overcast & Cold**

H -Windy

Interviewer Name (print)

Month/Day/Year

## B. VISITATION CENSUS

When did you arrive on the Forest

Where did you enter the Forest

In the FIRST day on the Forest

What was your FIRST stop . . . .

What did you do there . . . .

00 = Passthru

**98 = Next Stop**

99 = Exit, reentry

[illegible]

02 Beach Use  
58 Bicycling  
06 Boat, Manual  
04 Boat, Power  
05 Boat, Sail  
62 Collecting (Rocks)  
27 Conducted Tour  
74 Camping (Hard)

73 Camping (Soft)  
22 Evening Program  
38 Fish  
43 Golf  
93 Hike, Day  
59 Horseback  
47 Hunting  
48 Ice Fishing  
89

83 Ice Skating  
61 ORV  
60 Picnic  
21 Rngr Guided Walk  
07 Scuba  
01 Swim  
23 Visitor Center  
03 Water Ski  
63 Wildlife Observation

WORK SHEET:

What other Forests have you already visited this trip?

\_\_\_\_( )  
\_\_\_\_( )  
\_\_\_\_( )  
\_\_\_\_( )

\_\_\_\_( )  
\_\_\_\_( )  
\_\_\_\_( )  
\_\_\_\_( )

How often have you visited the Forest before?

1. \_\_\_Never 2. \_\_\_Periodically 3. \_\_\_Annually 4. \_\_\_Month

What is your home ZIP CODE?

(if OTHER foreign, enter 99999)

If not known enter 0 0 0 0 0

or Canadian POSTAL CODE